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Guido Hiertz

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/561,457
Filing Date: January 10, 2008
Appellant(s): HIERTZ ET AL.

HIERTZ et al.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/18/2010 appealing from the Office action mailed 8/20/2009.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The Statement of the Status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. In light of Appellant's remarks, rejections of claims 1-16 and 25 under 35 U.S.C. 112, first paragraph for containing new matters, are withdrawn.

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except

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for the grounds of rejection (if any) listed under the subheading “WITHDRAWN REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

6404756	Whitehill et al.	06-2002
5231634	Giles et al.	7-1993
5734898	He	3-1998
6704932	Matsunaga et al.	3-2004
5960001	Shaffer et al.	9-1999
5633911	Han et al.	5-1997
7433691	White	10-2008

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 8-11, 13, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6404756 B1 Whitehill et al. (hereinafter Whitehill) in view of US 5231634 A Giles et al. (hereinafter Giles), and further in view of US 5734898 A He (hereinafter He).

Regarding **claim 1** (currently amended), Whitehill discloses *a method of decentralized medium access control in a communications network consisting of a plurality of stations, wherein a sending station transmits a reservation request (e.g. Request To Send or RTS) for a*

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future transmission to an intended receiving station (see at least column 6 lines 30-37), the intended receiving station being in a reception range of the sending station (see at least column 6 lines 51-54), the method comprising: transmitting the reservation request (e.g. RTS) signalling reservation information including the duration of the future transmission, thereby defining a time period of the future transmission n (see at least column 9 lines 51-61), and, in case of a multi-channel system, further including a frequency or code of the channel of the future transmission, in order to establishing a reservation, and overhearing the reservation request by stations active in the reception range, such that stations other than the intended receiving station store the reservation information locally and defer from medium access during the time period and on the channel of the future transmission (see at least column 5 lines 21-28).

Whitehill clearly discloses that the reservation request (e.g. RTS) includes duration of the transmission (see at least Figure 4a and column 6 lines 51-61). Whitehill is however silent as to *reservation request signalling reservation information including starting point*. However, in the same field of endeavor, Giles discloses a RTS including the starting point of a future transmission (see at least Giles column 6 lines 37-52, where Giles discloses a start point of transmission e.g. the end of the second “key up” time). It would have been obvious to a person of ordinary skill in the art to incorporate the indication of a transmission starting point as taught by Giles, for the purpose of facilitate efficient signaling.

Whitehill is does not specifically disclose *thereby establishing a reservation*, which according to Applicant (see Applicant’s 6/03/2009 remarks page 10) remarks implies that the transmitting step finalizes the reservation. However, in an analogous field of endeavor, He discloses a communication protocol wherein a request for update (i.e. analogous to the reservation request)

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is sent to a destination station (e.g. server) by a source station (e.g. client A), wherein the source station proceeds to the next the process (i.e. analogous to finalizing the reservation request) without needing a response message from the destination station (see at least He column 9 lines 42 – 52, see additionally He column 1 lines 36-44, where he discussed the disadvantages of request-acknowledgement protocol). It would have been obvious to a person or ordinary skill in the art at the time of the invention to modify Whitehill by removing the CTS message in the reservation creation process, for the purpose of further alleviating traffic congestion on the reservation channel, and thereby improve the reservation creation process.

Regarding **claim 2** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1**. Whitehill further discloses:

- wherein the intended receiving station acknowledges the reservation request by returning an acknowledgement message (e.g. Clear-To-Send or CTS) repeating said reservation information (see at least column 6 lines 51-56 column 9 lines 51-61, where Whitehill discloses a CTS repeating the actual parameters used for the reserved transmission);
- and stations other than the intended receiving station active in the reception range for transmissions of the intended receiving station perform the actions of storing the reservation information locally and defer from medium access during the time period and on the channel of the future transmission upon overhearing the acknowledgement message (see at least column 5 lines 21-28 and column 11 lines 26-44).

Regarding **claim 3** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1**. Whitehill does not specifically disclose *wherein the reservation request is transmitted piggy-back to a data packet in a frame or in another signaling*

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frame. However, Giles discloses a frame format wherein a reservation request (e.g. FC type being RTS) is piggy-backed to a data packet (e.g. data unit) (See at least Giles Figure 1 and column 4 lines 45-56). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

Regarding **claim 4** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1** and **3**. Whitehill does not specifically disclose *wherein an acknowledgement message is transmitted piggy-back in an acknowledgement frame of the data packet or another data packet*. However, Giles discloses a frame format wherein a reservation request (e.g. FC type being CTS) is piggy-backed to a data packet (e.g. data unit) (See at least Giles Figure 1 and column 4 lines 45-56). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

Regarding **claim 8** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1**. Whitehill does not specifically disclose the limitations of claim 8. However, Giles discloses a RTS frame where the starting for transmission is defined relatively to a specific point time associated with the reservation request message (see at least Giles column 6 lines 37-52, where Giles discloses a start point of transmission e.g. the end of the second "key up" time). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

Regarding **claim 9** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of claim **1**. Whitehill does not specifically disclose the limitations of claim 9. However, Giles discloses *a specific point in time* (e.g. see Figure 4A, the beginning of second "KEY-UP"), *which serves as reference point for the definition of the starting time of the future*

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transmission, is defined relatively to the beginning of the reservation request message and signalled inside the reservation request message (see at least Giles column 6 lines 37-52). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

Regarding **claim 10** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1** and **2**. Whitehill is silent as to the limitations of **claim 10**.

However, Giles discloses *a starting point of the future transmission signaled in the acknowledgement message is defined relative to the beginning or end of the sending time or the beginning or end of the time slot (e.g. see Figure 4A, the beginning of the third "KEY-UP") as a time base of the acknowledgement message and adapting starting point information from the sending station to the time base of the acknowledgement message* (see at least Giles column 6 lines 37-52). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

Regarding **claim 11** (original), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1**. Whitehill further discloses: *wherein collisions of reservation requests are resolved by a collision resolution mechanism* (e.g. by having a dedicated reservation channel, see at least column 3 lines 29-36).

Regarding **claim 13** (original), Whitehill and Giles disclose the limitations as shown in the rejection of claim **1**. Whitehill is silent as to *wherein reservation information of a most recent reservation request replaces an existing reservation if the most recent reservation request has an earlier due time than the existing information*. However, it is obvious to a person of ordinary skill in the art that a reservation with an earlier due time requires more immediate attention of the

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participating stations (e.g. it requires channel resource at an earlier time period than requested by an existing reservation information, which may come in first but request a later due time) then the one with a later due time. Therefore, in order to facilitate quality of service, it would have to been obvious to a person of ordinary skill in the art to modify Whitehill and Gilles to give the reservation with an earlier due time priority over the reservation with a later due time in order to facilitate quality of service.

Regarding **claim 25** (currently amended), Whitehill discloses

- *a station which transmits a reservation request (e.g. Request To Send or RTS) for a future transmission to an intended receiving station, thereby establishing a reservation (see at least column 6 lines 30-37),*
- *the reservation request comprising signalling reservation information including a time period of said future transmission, and, in case of a multi-channel system, frequency or code of the channel of the future transmission (see at least column 9 lines 51-61).*

Whitehill further discloses that the reservation request (e.g. RTS) includes duration of the transmission (see at least Figure 4a and column 6 lines 51-61). Whitehill is however silent as to *reservation request signalling reservation information including starting point*. However, in the same field of endeavor, Giles discloses a RTS including the starting point of a future transmission (see at least Giles column 6 lines 37-52, where Giles discloses a start point of transmission e.g. the end of the second “key up” time). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill

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in view of Giles.

Regarding **claim 17** (currently amended), Whitehill discloses *a communications network consisting of a plurality of stations, comprising:*

- *a sending station which transmits a reservation request for a future transmission (see at least column 6 lines 30-37);*
- *an intended receiving station, being in a reception range (e.g. node B receives from node A, therefore is in a reception range of node A) of the sending station(see at least column 6 lines 51-54), for receiving the reservation request to establish a reservation, wherein the reservation request signaling reservation information includes a time period of the future transmission, and, in case of a multi-channel system, frequency or code of the channel of the future transmission (see at least column 9 lines 51-61);*
- *and stations, other than the intended receiving station, active in the reception range which overhear the reservation request, for storing said reservation information locally and deferring from medium access during the time period and on the channel of the future transmission(see at least column 5 lines 21-28).*

Whitehill further discloses that the reservation request (e.g. RTS) includes duration of the transmission (see at least Figure 4a and column 6 lines 51-61). Whitehill is however silent as to *reservation request signalling reservation information including starting point*. However, in the same field of endeavor, Giles discloses a RTS including the starting point of a future transmission (see at least Giles column 6 lines 37-52, where Giles discloses a start point of transmission e.g. the end of the second “key up” time). It would have been obvious to a person of ordinary skill in the art to combine Giles's teaching in order to facilitate efficient signaling.

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Regarding **claim 18** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of claim **17**. Whitehill further discloses:

- *said intended receiving station acknowledges said reservation request by returning an acknowledgement message (e.g. Clear-To-Send or CTS) repeating the reservation information (see at least column 6 lines 51-56 column 9 lines 51-61, where Whitehill discloses a CTS repeating the actual parameters used for the reserved transmission);*
- *and stations other than the intended receiving station active in the reception range for transmissions of the intended receiving station perform the actions of storing the reservation information locally and defer from medium access during the time period and on the channel of the future transmission upon overhearing the acknowledgement message (see at least column 5 lines 21-28 and column 11 lines 26-44).*

Claims 5, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of US 6704932 B1 Matsunaga et al. (hereinafter Matsunaga).

Regarding **claim 5** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of **claim 1**. Whitehill further discloses a scheme that allows prioritized access for the channel (see at least column 17 lines 57-61). Whitehill however does not specifically disclose the limitations of claim 5. However, in a related field of endeavor, Matsunaga discloses a reservation request (e.g. reservation information) includes information (e.g. identifier) on the priority class of a further transmission (see at least Matsunaga column 3 lines 60-67 and column 4 lines 1-20) and allocating band resource to reservation information

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(e.g. reservation request) with a higher priority over a lower priority one (therefore, the low priority request which may come in first is replaced by the high priority request which may come in second, and thereby delaying the band resource for transmission requested by the lower priority request, see at least Matsunaga column 8 lines 50-67 and column 9 lines 1-8). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Matsunaga to include priority information in the reservation request and use the priority information to facilitate quality of services.

Regarding **claim 6** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of **claim 1**. Whitehill further discloses a scheme that allows prioritized access for the channel (see at least column 17 lines 57-61). Whitehill does not specifically disclose the limitations of claim 6. However, in a related field of endeavor, Matsunaga discloses a signaling (e.g. reservation information, analogues to RTS, however, Whitehill teaches repeating in the acknowledgement message e.g. CTS the transmission parameters) includes information (e.g. identifier) on the priority class of a further transmission (see at least Matsunaga column 3 lines 60-67 and column 4 lines 1-20) and allocating band resource to reservation information (e.g. reservation request) with a higher priority over a lower priority one (therefore, the low priority request which may come in first is replaced by the high priority request which may come in second, and thereby delaying the band resource for transmission requested by the lower priority request, see at least Matsunaga column 8 lines 50-67 and column 9 lines 1-8). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Matsunaga to include priority information in the acknowledge message and use the priority information to facilitate quality of services.

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Regarding **claim 12** (original), Whitehill, Giles and He disclose the limitations as shown in the rejection of claim **1**. Whitehill is silent as to *wherein a reservation request of shorter duration of transmission replaces an existing reservation of longer duration of transmission*. However, in a related field of endeavor, Matsunaga discloses allocating band resource to reservation request (e.g. reservation information) with a higher priority over a lower priority (see at least Matsunaga column 3 lines 60-67 and column 4 lines 1-20, column 8 lines 50-67 and column 9 lines 1-8), therefore it is obvious to a person of ordinary skill in the art that a reservation request with a shorter duration but a high priority will be first treated over (e.g. replacing, in the case where lower priority one comes in before the higher priority one) a reservation request with a longer duration but a lower priority, so as to facilitate quality of services.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of Matsunaga.

Regarding **claim 19** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of **claim 17**. Whitehill further discloses a scheme that allows prioritized access for the channel (see at least column 17 lines 57-61). Whitehill however does not specifically disclose the limitations of claim 19. However, in a related field of endeavor, Matsunaga discloses a reservation request (e.g. reservation information) includes information (e.g. identifier) on the priority class of a further transmission (see at least Matsunaga column 3 lines 60-67 and column 4 lines 1-20) and allocating band resource to reservation information (e.g. reservation request) with a higher priority over a lower priority one (therefore, the low priority request which may come in first is replaced by the high priority request which may come in second, and thereby

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delaying the band resource for transmission requested by the lower priority request, see at least Matsunaga column 8 lines 50-67 and column 9 lines 1-8). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Matsunaga to include priority information in the reservation request and use the priority information to facilitate quality of services.

Regarding **claim 20** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of **claim 17**. Whitehill further discloses a scheme that allows prioritized access for the channel (see at least column 17 lines 57-61). Whitehill does not specifically disclose the limitations of claim 20. However, in a related field of endeavor, Matsunaga discloses a signaling (e.g. reservation information, analogues to RTS, however, Whitehill teaches repeating in the acknowledgement message e.g. CTS the transmission parameters) includes information (e.g. identifier) on the priority class of a further transmission (see at least Matsunaga column 3 lines 60-67 and column 4 lines 1-20) and allocating band resource to reservation information (e.g. reservation request) with a higher priority over a lower priority one (therefore, the low priority request which may come in first is replaced by the high priority request which may come in second, and thereby delaying the band resource for transmission requested by the lower priority request, see at least Matsunaga column 8 lines 50-67 and column 9 lines 1-8). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Matsunaga to include priority information in the acknowledge message and use the priority information to facilitate quality of services.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view

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of Giles and He, and further in view of US 5960001 Shuffer et al. (hereinafter Shuffer).

Regarding **claim 7** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of **claim 1**. Whitehill is silent as to the limitations of claim 7. However, in a related filed of endeavor, Shuffer teaches a network terminal can reserves a periodic time slots for periodic transmission by transmitting reservation information (see at least Shuffer Abstract and column 3 lines 20-32, such periodic time slots are thus derived from the reservation information). It would have been obvious to a person for ordinary skill in the art to modify Whitehill and Giles in view of Shuffer in order to facilitate and improve the periodic transmission.

Whitehill further discloses stations active in said reception range overhear said reservation request and other stations than said intended receiving station perform the actions of storing said reservation information locally and defer from medium access during all signalled time periods on all respective channels of the future transmissions(see at least column 5 lines 21-28).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of Shuffer.

Regarding **claim 21** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of **claim 17**. Whitehill is silent as to the limitations of claim 21. However, in a related filed of endeavor, Shuffer teaches a network terminal can reserves a periodic time slots for periodic transmission by transmitting reservation information (see at least Shuffer Abstract and column 3 lines 20-32, such periodic time slots are thus derived from the reservation information). It would have been obvious to a person for ordinary skill in the art to modify

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Whitehill and Giles in view of Shuffer in order to facilitate and improve the periodic transmission.

Whitehill further discloses stations active in said reception range overhear said reservation request and other stations than said intended receiving station perform the actions of storing said reservation information locally and defer from medium access during all signalled time periods on all respective channels of the future transmissions(see at least column 5 lines 21-28).

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of US 5633911 A Han et al. (hereinafter Han).

Regarding **claim 14** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of **claim 1**. Whitehill is silent as to a *revocation message*, and thus further fails to disclose limitations of claim 14. However, in a related field of endeavor, Han discloses after requesting a channel for communication, sending a revocation message (e.g. cancellation request) to cancel the reservation (therefore deleting the reservation request) (see at least Han column 2 lines 54-60, column 4 lines 61-66). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Han to include a revocation message on the reservation channel (so other stations can hear and act accordingly, in the manner disclosed by Whitehill) in order to efficiently use the limited channel resource.

Regarding **claim 15** (currently amended), Whitehill, Giles and He disclose the limitations as shown in the rejection of **claim 1**. Whitehill is silent as to a *revocation message*, and thus further fails to disclose limitations of claim 15. However, in a related field of endeavor, Han discloses

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after requesting a channel for communication, sending a revocation message (e.g. cancellation request) to cancel the reservation (therefore deleting the reservation request), and an acknowledgement (e.g. cancellation confirmation) the revocation message (see at least Han column 2 lines 54-60, column 4 lines 61-66). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Han to include a revocation message acknowledgement on the reservation channel (so other stations can hear and act accordingly, in the manner disclosed by Whitehill) in order to efficiently use the limited channel resource.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of Han.

Regarding **claim 22** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of **claim 17**. Whitehill is silent as to a *revocation message*, and thus further fails to disclose limitations of claim 22. However, in a related field of endeavor, Han discloses after requesting a channel for communication, sending a revocation message (e.g. cancellation request) to cancel the reservation (therefore deleting the reservation request) (see at least Han column 2 lines 54-60, column 4 lines 61-66). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Han to include a revocation message on the reservation channel (so other stations can hear and act accordingly, in the manner disclosed by Whitehill) in order to efficiently use the limited channel resource.

Regarding **claim 23** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of **claim 17**. Whitehill is silent as to a *revocation message*, and thus further fails to disclose limitations of claim 23. However, in a related field of endeavor, Han discloses after

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requesting a channel for communication, sending a revocation message (e.g. cancellation request) to cancel the reservation (therefore deleting the reservation request), and an acknowledgement (e.g. cancellation confirmation) the revocation message (see at least Han column 2 lines 54-60, column 4 lines 61-66). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of Han to include a revocation message acknowledgement on the reservation channel (so other stations can hear and act accordingly, in the manner disclosed by Whitehill) in order to efficiently use the limited channel resource.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles and He, and further in view of Applicant's admitted prior art and US 7433691 B1 White (hereinafter White).

Regarding **claim 16** (currently amended), Whitehill Giles and He disclose the limitations as shown in the rejection of **claim 1**. Whitehill is silent as to the limitations of claim 16. However, Applicant admits (by acquiescing to official notice presented in the previous Office Action) that it is well known in the art of distributed communication, to broadcast and share information regarding the network operating parameters in order to maintain the ad-hoc state. White discloses such a well known method wherein a station (e.g. node 102) broadcast its locally stored information (e.g. routing table information, analogous to reservation information) so that other stations can receive and update the information and make use of it when transmitting (see at least White column 4 lines 27-41). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of a commonly knowledge in the art evidenced by White in order to maintain the network in the absence of a central controller (e.g. an access

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point).

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehill in view of Giles, and further in view of Applicant's admitted prior art and White.

Regarding **claim 24** (currently amended), Whitehill and Giles disclose the limitations as shown in the rejection of **claim 17**. Whitehill is silent as to the limitations of claim 24. However, Applicant admits (by acquiescing to official notice presented in the previous Office Action) that it is well known in the art of distributed communication, to broadcast and share information regarding the network operating parameters in order to maintain the ad-hoc state. White discloses such a well known method wherein a station (e.g. node 102) broadcast its locally stored information (e.g. routing table information, analogous to reservation information) so that other stations can receive and update the information and make use of it when transmitting (see at least White column 4 lines 27-41). It would have been obvious to a person of ordinary skill in the art to modify Whitehill and Giles in view of a commonly knowledge in the art evidenced by White in order to maintain the network in the absence of a central controller (e.g. an access point).

(10) Response to Argument

With regard to **claim 1, 17 and 25**, the Appellant essentially contends that the combination of Whitehill, Giles and He fails to render obvious the following feature of claim - *establishing (i.e. finalizing) a reservation by the step of transmitting the reservation request* (e.g. “thereby establishing a reservation...” as recited in the instant claim) (see Appellant remarks on page 12 of Appeal Brief). Specifically, the Appellant alleges that the *He* reference is not analogous, and

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therefore can not be combined to build a rejection based under 35 U.S.C. 103 (a) (see Appellant's remarks on page 13). The Examiner respectfully disagrees.

The Examiner submits that the *He* reference is analogous, and therefore applicable as presented in rejection of claim 1, based on at least the following reasons that are readily recognized by one of ordinarily skilled artisan in the field. The Appellant's inventions concerns transmitting a request (e.g. reservation request) from one terminal to another, analogously, the *He* reference concerns transmitting a request (e.g. update request) from one terminal to another. *He* discloses a computer communication system, which predates the wireless LAN system. It is considered that an ordinarily skilled artisan would have been compelled to look at how such predecessors in related arts have solved the same problems faced by them, regardless of the actual transmission medium or content of data because of the potential benefits verse the reduced research expenses. That is, it was/is obvious to borrow features from a different art, but same problem solving area. He discloses that "client A can proceed to the next process without waiting for the server to respond" (e.g. with an acknowledgement) (see at least He column 9 lines 42 – 52, see additionally He column 1 lines 36-44, where He discusses the disadvantages of request-acknowledgement protocol, which is supposedly solved by not requiring an acknowledgement). The Examiner contents that this teaching of *He* is applicable to the method of Whitehill, which discloses a channel reservation scheme that utilizes a RTS-CTS (i.e. a request – acknowledgement) as recognized by the Appellant (see Appellant's remarks on page 12 of Appeal Brief). As one of ordinarily skilled artisan would appreciate, modifying Whitehill by proceeding to the establishment of a channel reservation without waiting for an acknowledgement would at least bring about the advantage of avoiding traffic congestion, as

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discussed by He.

The Appellant uses essentially the same argument for the rest of the claims. Therefore all other claims are believed to be addressed per the preceding paragraph.

Furthermore, the Examiner contends that, contrary to the Appellant allegations (see Appellant's remarks on page 11 of Appeal Brief), the claimed language "*thereby establishing a reservation....*" Is not a positive limitation carrying patentable weight, but for 'compact prosecution' the examiner has nonetheless treated the limitation (above). Instead, the examiner considers the '*thereby establishing a reservation*' clause to merely provide a name to the 'transmitting' step. Therefore it is considered that once the recited step of '*transmitting the reservation request...*' is performed, it is considered that the reservation is necessarily named as being '*established*'. Thus, the '*overhearing the reservation request...*' is simply interpreted as '*overhearing the transmitted reservation request...*'. Appellant's argument that in order to establish a reservation, the prior art, requires an additional step is therefore not persuasive, since it is based on unclaimed features being attributed to the phrase "*thereby establishing a reservation*". Finally, the claim is not close ended such that the 'transmitting' step by itself necessarily produces a complete reservation, as argued.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

/YU (Andy) GU/
Examiner, Art Unit 2617

Conferees:

Lester Kincaid

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